

**COASTAL IMPACT ASSISTANCE PROGRAM (CIAP)
PROJECT NOMINEE FACT SHEET**

1). Project Title:

Ship Shoal: Whiskey Island West Flank

2). Entity/Individual Nominating Project:

Terrebonne Parish Consolidated Government

3). Contact Information:

Terrebonne Parish Consolidated Government
P.O. Box 2768
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Houma, LA 70361
(985) 873-6405
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Mr. Al Levron
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4). Total State CIAP Funds Requested:

Total CIAP Funds Requested: \$39 million

5). Infrastructure Funds Proposed:

There are \$0 infrastructure funds proposed for this project.

6). Description and Location of Project:

Whiskey Island, is one of five islands that make up the Isles Dernieres barrier island chain. The proposed project is in the Terrebonne Basin of CWPPRA Region 3, Terrebonne Parish, approximately 18 miles southwest of Cocodrie, Louisiana. The island is surrounded by Coupe Colin to the west, Whiskey Pass to the east, Lake Pelto, Caillou Boca and Caillou Bay to the north, and the Gulf of Mexico to the south. This project will extend Whiskey Island westward.

7). Project Type: 1, 2 & 4

This project, a Barrier Island Restoration and Marsh Creation Project, meets the criteria of CIAP Project Types 1, 2 and 4. It is presented for the conservation, restoration and protection of coastal areas, to mitigate damage to fish, wildlife and natural resources and the implementation of a federally approved marine, coastal or comprehensive conservation management plan.

8). Project Justification:

The Isles Dernieres barrier island chain, which is considered one of the most rapidly deteriorating barrier shorelines in the United States, is losing its structural functions for the coastal/estuarine ecosystem. Of primary concern among these functions is the chain's storm buffering capacity and the protection it provides human populations, oil and gas infrastructure, inland bays, estuaries and wetlands. Chain breakup has resulted from major storm actions, human alterations and the loss of nourishing sediments from the natural system. Whiskey Island changes from 1978 to 1988 include an average annual loss of 31.1 acres.

One approach to the problem includes mining and importing offshore Ship Shoal sediment into the Louisiana coastal ecosystem to increase sediment supply and strengthen island formation. Other approaches involve rebuilding the natural structural framework within the coastal ecosystem to provide for separation of the gulf and the estuary, creating a continuous protective barrier for back bays and inland marshes to reduce wave energy, thereby helping to reduce land loss and restore the longshore transport system. If implemented, this project will provide a unique and sustainable barrier island habitat for numerous biological species, several of which are endangered, in areas that are presently open water.

The goal of this project is to increase the longevity of the previously restored and natural portions of the island by increasing the island's width. Increasing the island's width will help to retain sand volume as well as elevation. Approximately 300 acres of intertidal, back barrier marsh will be created by semiconfined disposal and placement of dredged material. This material is expected to come from a sediment source near the island.

This project was presented at the CWPPRA PPL 11 (TE-47) planning round. Engineering and design has been completed. The project was a candidate for Phase II (construction) funding in December of 2205, but was not selected.

Preliminary Project Benefits

- 1) This project will restore the integrity of the west flank of Whiskey Island to retain its structural function.
- 2) The project will provide new offshore sediment into the west flank, restoring approximately 387 acres of barrier island habitat in the island's western flank.
- 3) This project will provide only indirect benefits to infrastructure; however, "There's no question that these buffers (barrier islands and coastal wetlands) are the first line of defense against a storm. It's estimated that every mile or two of wetlands reduces storm surge by about a foot. So when we talk about creating protection equal to conditions before Katrina, we must include wetland and barrier island restoration." *Robert Dalrymple, Watermarks, Number 30, March 2006.*
- 4) This project will complement and provide synergistic restoration benefits with other CWPPRA restoration projects, including the Whiskey Island Restoration (TE-27) and the Whiskey Island Back Barrier Marsh Creation Project (TE-50), which is currently in the

CWPPRA Engineering and Design Phase. TE-27, which included dredging and placement of material, vegetative planting and sand fencing, was completed in June 2000.

Preliminary Estimated Construction Costs:

\$39,000,000.00

Coast 2050 Strategy:

This project was nominated and developed under the CWPPRA PPL Number 11. Phase II (construction) funding was requested in December, 2005, but the project was not selected. This project meets the following Coast 2050 strategy:

Restoring/maintaining barrier islands.

In addition, the project is also consistent with Action Plan EM-5 (Preservation and Restoration of Barrier Islands, of the federally approved Comprehensive Conservation Management Plan (CCMP) of the Barataria-Terrebonne National estuary Program. The project also meets the restoration goals identified by the Strategic Plan for Coastal Restoration adopted by the Terrebonne Parish Coastal Zone Management and Restoration Advisory Committee and supported by the Terrebonne Parish Council:

9). Project Cost Share:

The project cost share is unknown at this time.

Attachments

1. CWPPRA Project Nomination Fact Sheet – EPA



Ship Shoal: Whiskey West Flank Restoration (TE-47)

Project Status

Approved Date: 2002

Project Area: 398 acres

Net Benefit After 20 Years: 182 acres

Project Type: Barrier Island Restoration

Cost: \$39 million

Status: Engineering and Design

Location

The project is located on Whiskey Island, a barrier island in the Isles Dernieres chain in south Terrebonne Parish, Louisiana. The Whiskey West Flank project will extend Whiskey Island westward.

Problems

The Isles Dernieres barrier island chain, which is considered one of the most rapidly deteriorating barrier shorelines in the United States, is losing its structural functions for the coastal/estuarine ecosystem. Chief among these is the chain's storm buffering capacity and the protection it provides human populations, oil and gas infrastructure, inland bays, estuaries, and wetlands. Chain breakup has resulted from both major storm actions and, due to human alterations, the loss of nourishing sediment from the natural system. Whiskey Island changes from 1978 to 1988 include the average loss of 31.1 acres per year.



This project will restore approximately 387 acres of barrier island habitat into the island's western flank pictured above.

For more project information, please contact:



Federal Sponsor:
U.S. Environmental Protection Agency
Baton Rouge, LA
(214) 665-6722

Restoration Strategy

The project's objectives include: 1) restoring the integrity of the west flank of Whiskey Island to retain its structural function; 2) adding new offshore sediment into the west flank; and 3) restoring roughly 387 acres of barrier island habitat into the island's western flank.

One approach to the problem includes mining and importing offshore Ship Shoal sediment into the Louisiana coastal ecosystem to increase the sediment supply and strengthen island formation. Other approaches involve rebuilding the natural structural framework within the coastal ecosystem to provide for separation of the gulf and the estuary, and creating a continuous protective barrier for back bays and inland marshes to reduce wave energies, thereby helping to reduce land loss and restore the longshore transport system. One final approach towards meeting these goals is to provide a unique and sustainable barrier island habitat for numerous biological species, several of which are endangered, in areas that are presently open water.

Ship Shoal sand would be mined by a cutterhead hydraulic dredge and/or hopper dredge. It would then be transported approximately 8 miles to Whiskey Island. Restored areas will include: 1) 52 acres of 7-foot high, 150-foot wide dunes; 2) 114 acres of above-tide habitat at an elevation of 4 feet; 3) 208 acres of intertidal habitat at an elevation of 2 feet; 4) 8 acres of subtidal habitat. All areas will be planted and have sand fencing placed in order to trap wind-blown sediment.

Details for pipes and booster pumps or additional equipment for hopper dredge operations will be analyzed during engineering and design. Conventional equipment is expected to be used for earth moving to obtain island design elevations, widths, and slopes. Approximate design features for the west flank restoration include beach platform, dune, and marsh platform.

Maintenance is not proposed for this project. If a disastrous storm event should cause significant damage, a restoration project would be proposed.

Progress to Date

This project was selected for Phase I (engineering and design) funding at the January 2002 Breaux Act Task Force meeting. It is included as part of Priority Project List 11.

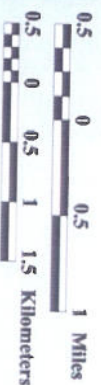
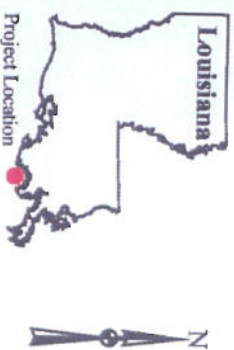


Local Sponsor:
Louisiana Department of Natural Resources
Baton Rouge, LA
(225) 342-7308

Ship Shoal: Whiskey West Flank Restoration (TE-47)

Project Boundary

USGS
science for a changing world



Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
Thematic Mapper Satellite Imagery 2000
Map Date: March 10, 2002
Map ID: 2002-11-223

Gulf of Mexico



Cattou Bay

Bay
Wilson

Pelican Lake

Bay
Round

Cattou Boca